

### **Amendments to the Specification:**

Please replace the paragraph beginning at page 12, line 5, with the following rewritten paragraph:

--Fig. 3 illustrates the nucleic acid sequence (SEQ ID NO: 65) comprising the chicken lysozyme gene expression control region (SEQ ID NO: 67), the nucleic acid sequence SEQ ID NO: 66 encoding the chicken expression optimized human interferon  $\alpha 2b$  (IFNMAGMAX) and the SV40 polyadenylation signal sequence (SEQ ID NO: 68).--

Please replace the paragraph beginning at page 12, line 11, with the following rewritten paragraph:

--Fig. 4 illustrates the nucleic acid sequence SEQ ID NO: 66 encoding the chicken expression optimized human interferon  $\alpha 2b$  (IFNMAGMAX).--

Please replace the paragraph beginning at page 12, line 20, with the following rewritten paragraph:

--Fig. 7 illustrates the yield of the chicken expression optimized human interferon  $\alpha 2b$  (IFNMAGMAX) in transfected quail oviduct cultured cells.--

Please replace the paragraph beginning at page 54, line 20, with the following rewritten paragraph:

--Another viral gene delivery system useful in the present invention utilizes adenovirus-derived vectors. The genome of an adenovirus can be manipulated such that it encodes a gene product of interest, but is inactivated in terms of its ability to replicate in a normal lytic viral life cycle (see, for example, Berkner et al., 1988, *BioTechniques* 6: 616; Rosenfeld et al., 1991, *Science* 252: 43 1434; and Rosenfeld et al., 1992, *Cell* 68: 143-155, all of which are incorporated herein by reference in their entireties). Suitable adenoviral vectors derived from the adenovirus strain Ad type 5 dl324 or other strains of adenovirus (e.g., Ad2, Ad3, Ad7 etc.) are well known to those skilled in the art. The virus particle is relatively stable and amenable to purification and concentration, and as above, can be modified so as to affect the spectrum of infectivity. Additionally, introduced adenoviral DNA (and foreign DNA contained therein) is not integrated into the genome of a host cell but remains episomal, thereby avoiding potential problems that can occur as a result of insertional mutagenesis in situations where introduced DNA becomes integrated into the host genome (e.g., retroviral DNA). Most replication-defective adenoviral vectors currently in use and therefore favored by the present invention are deleted for all or parts of the viral E1 and

E3 genes but retain as much as 80% of the adenoviral genetic material (see, *e.g.*, Jones *et al.*, 1979, *Cell* 16:683; Berkner *et al.*, *supra*; and Graham *et al.*, 1991, pp. 109-127 in "Methods in Molecular Biology," vol. 7, E.J. Murray, ed., Humana, Clifton, N.J., all of which are incorporated herein by reference in their entirety). Expression of an inserted gene such as, for example, encoding the human interferon  $\alpha 2b$ , can be under control of the exogenously added lysozyme gene expression control region sequences.--

Please replace the paragraph beginning at page 61, line 19, with the following rewritten paragraph:

--The chicken lysozyme gene expression control region was isolated by PCR amplification. Ligation and reamplification of the fragments thereby obtained yielded a contiguous nucleic acid construct comprising the chicken lysozyme gene expression control region operably linked to a nucleic acid sequence optimized for codon usage in the chicken (SEQ ID NO: 66) and encoding a human interferon  $\alpha 2b$  polypeptide optimized for expression in an avian cell.--

Please replace the paragraph beginning at page 64, line 2, with the following rewritten paragraph:

--The complete nucleotide sequence (SEQ ID NO: 65), shown in Fig. 3, of the 12.5 kb chicken lysozyme promoter region/IFNMAGMAX construct spans the 5' matrix attachment region (5' MAR), through the lysozyme signal peptide, to the sequence encoding the gene IFNMAGMAX and the subsequent polyadenylation signal sequence. The IFNMAGMAX nucleic acid sequence (SEQ ID NO:66), shown in Fig. 4, encoded human interferon  $\alpha 2b$  (IFN) that had been synthesized based on a codon usage table compiled from the four most abundantly expressed hen egg white proteins ovalbumen, ovotransferrin, ovomucoid and lysozyme. The expressed IFN  $\alpha 2b$  sequence within plasmid pAVIICR-A115.93.1.2 functioned as a reporter gene for lysozyme promoter activity. This plasmid construct may also be used for production of interferon  $\alpha 2b$  in the egg white of transgenic chickens. The isolated sequence of the 11.94 kb chicken lysozyme promoter region (SEQ ID NO: 67) alone is shown in FIG. 5. The sequence of the SV40 polyadenylation signal sequence (SEQ ID NO: 68) is shown in Fig. 6.--